

NR2 NATURE & CULTURE

Rubenstein School of Environment & Natural Resources, University of Vermont
Course Syllabus, Spring 2016

Instructor: **Dr. Adrian Ivakhiv**

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Office hours: Mon 2:30-4:00, Fri 11:00-12:00 (please contact Cathy Trivieres at envs@uvm.edu)

TAs: Kristen Andrews, Lyra Brennan, Christine Hart, Amanda Strickland, Sam Talbot, Finn Yarbrough

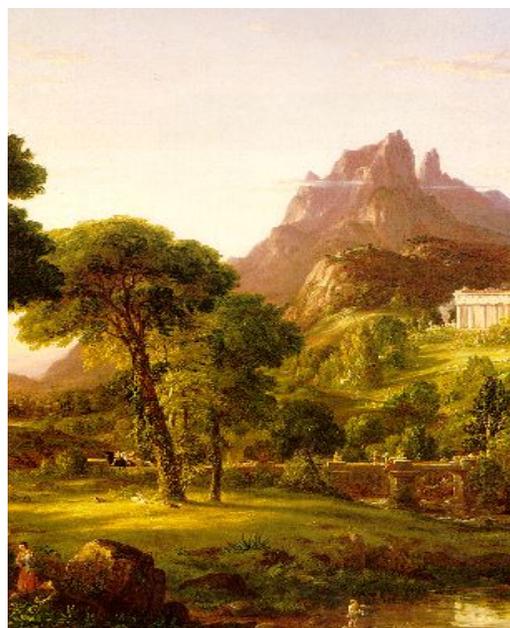
Writing mentors: Sonya Gluck & Sydney Lister

Website: On Blackboard

Lectures: Mon & Wed 10:50-11:40 am, Carpenter Auditorium, Given Medical Building

Discussion sections (and TAs):

- | | | |
|------------------------------------|--------------------------------------|----------------------------------|
| 1. Thu 6:00-6:50 Waterman 401 (CH) | 4. Thu 7:35-8:25 Kalkin 322 (FY) | 7. Fri 1:10-2:00 Rowell 102 (KT) |
| 2. Thu 6:00-6:50 L/L-A 102 (LB) | 5. Fri 12:00-12:50 Billings MLK (AS) | 8. Fri 1:10-2:00 Aiken 110 (AS) |
| 3. Thu 7:35-8:25 L/L-A 102 (LB) | 6. Fri 12:00-12:50 Kalkin 322 (KT) | 9. Fri 1:10-2:00 L/L-A 16 (ST) |



NR 2, *Nature and Culture*, is a part of the core curriculum of the Rubenstein School of Environment and Natural Resources. The core curriculum represents a body of knowledge, skills, and values that the School believes are central to the study of natural resources and the environment. This body of knowledge, skills, and values cuts across all academic programs within the School and attempts to integrate the natural sciences, social sciences, and humanities in an effort to approach full understanding and resolution of environmental and natural resource issues.

NR 2 is a companion course to NR 1, *Natural History and Field Ecology*. Where NR 1 provides an introduction to natural resources and the environment from an ecological and natural science perspective, NR 2 provides a social, cultural, and humanistic perspective. The two courses complement each other, because the knowledge and perspectives represented by the natural sciences, the social sciences, and the humanities must be integrated to fully address and resolve contemporary environmental and natural resource issues. Integration of these perspectives will be further emphasized in remaining RSENR core curriculum courses.

COURSE OBJECTIVES & LEARNING GOALS

The course is intended to meet the following two sets of objectives, and associated learning goals, for students who attend the lectures, participate in discussion groups, and fulfill the reading and writing requirements.

1. Introduction to the study of the relationship between human society and its natural environments, including societal responses to environmental challenges.

The course will draw on current knowledge and debates within the fields of environmental history, environmental anthropology and sociology, environmental psychology, environmental philosophy, and related areas, to provide students with the following:

- a) Objective: A basic overview of the history of relations between human societies and their natural environments, and of changing concepts of “nature” and cultural expression of environmental ideas/beliefs.
Goal: Students should be able to describe key episodes and factors in the historical development of human relations with the environment; critically assess the relative importance of these; and apply them to an understanding of current ecological challenges; and to identify the most salient concepts of nature as found in influential documents and cultural expressions in contemporary society.
- b) Objective: An overview of the historical development of modern conservation and environmental movements in the United States and globally.
Goal: Students should have a good working understanding of the origin, goals, development, diversification, and challenges faced by modern conservation and environmental movements, especially in the United States and to some extent globally.
- c) Objective: A basic introduction to the differences between theoretical approaches to human-nature interaction within the natural sciences, social sciences, and humanities; an in-depth introduction to six key interdisciplinary theoretical frameworks for understanding socio-environmental issues; and an overview of how various factors – including science and technology, politics and policy, economics, psychology, culture, and ethics – affect environmental and resource problems and challenges.
Goal: Students should be able to articulate the main differences between the six theoretical frameworks studied in the course, identify them in environmental discourse, and apply them to socio-environmental problems and challenges; and to adjudicate the relative importance of different factors (listed above) in the generation, communication, and resolution of environmental and resource problems and controversies.

2. Critical skills in interdisciplinary environmental studies.

The course is intended to allow students to develop the critical skills necessary for understanding and effectively acting on environmental issues and controversies. Since environmental issues are often highly complex, scientific uncertain, socially contentious, and involve many actors and diverse cultural constituencies, critical skills – in thinking, reading, writing, communication, and argumentation – are crucial for those intending to work in an environmental or natural resource field. Effective professional work in the environmental field thus requires mastering such abilities as

- the ability to listen and hear others’ views;
- the ability to critically analyze and adjudicate between different arguments and perspectives, recognizing their underlying assumptions and making sense of their similarities and differences;
- the ability to seek and find reliable information available in academic and other formats;
- the ability to communicate verbally, in writing, and through visual and other media, in multiple and culturally diverse contexts;
- and other general skills in critical thinking, reading, writing, communication, and argumentation.

The course will provide multiple opportunities for developing these skills through reading and writing assignments, class discussion, and other activities. As it is introductory, the main objective here is to prepare students for more advanced work in the Rubenstein School core and in the majors/programs of the School.

REQUIRED TEXTS, WEEKLY READINGS, & OTHER RESOURCES

- **Required Text:** Paul Robbins, John Hintz, and Sarah A. Moore, *Environment and Society*, 2nd edition (Wiley-Blackwell, 2014). This will be available for purchase at the UVM Bookstore.
- **Blackboard:** Additional weekly course readings will be made available on the BlackBoard course web site. You can read them online or print them out (right click on document). Blackboard will also be used for other important announcements (such as changes to the course schedule or readings), hand-outs, electronic discussions, sharing of grades, and the like.
- **Strongly Recommended Supplementary Text:** Any good pocket writer's style manual, such as Diana Hacker's and Nancy Sommers' *A Pocket Style Manual*, or Toby Fulwiler's and Alan Hayakawa's *Pocket Reference for Writers*. The best such books come out with new editions every few years; yours should be relatively recent, though it need not be the most recent. Good second-hand copies of editions from the last 7 or 8 years can be purchased online for under \$5. The virtue of having your own hard copy is that it's small and easy to carry around, and you get to know where to find things in it very quickly. (Use post-it bookmarks for indicating places you may wish to revisit.) Electronic copies may also be available, if you prefer those. It's strongly recommended that whatever book you get include sections on APA style, MLA style, and Chicago style citation formats.
- **Bailey Howe Library Resources:** UVM's reference librarians can help you locate information, search computer databases, and request documents from remote libraries. The reference librarian responsible for environmental resources is Laurie Kutner, whose office is in Room 100 of Bailey Howe Library. Please make use of the Environment Research Guide that she has set up at <http://researchguides.uvm.edu/environment>.
- **Writing Mentors:** Two writing mentors (Sonya Gluck and Sydney Lister) have been arranged for this class. They are available to you as resources when working on writing assignments. Workshops related to specific writing assignments will be announced in class and on Blackboard. If you would like extra help with writing problems or questions, you may contact one of the mentors (whose e-mails will be given out in class) or the Writing Center, located at the Learning Cooperative, 244 Living and Learning Commons (tel. 656-4075).
- **Please also see "Appendix B: Other Course and School Policies"** on p. 14 of this syllabus.

CONTACTING THE INSTRUCTORS

- **TAs:** Your Teaching Assistant should be your first contact for most issues. TAs will let you know the best way to contact them.

Your TA's name: _____ **Contact info:** _____

- **Contact info for Prof. Adrian Ivakhiv:** You can contact me, the instructor and course director, in one of the following ways: (a) in person at the end of lecture; (b) by e-mail at aivakhiv@uvm.edu; (c) by phone at 656-0180; or (d) by setting up an appointment with me during my office hours.

If you e-mail me, please always put "NR2" (no spaces, no zeroes) in the subject line. Be patient, but also persistent; I get hundreds of emails per day and am not always able to check e-mail daily. E-mail is best for most communications so that we both have a written record. Please make sure that any prior thread of relevant e-mails is attached to your message.

Office hours: I will normally be available for consultation during the following regular office hours (with exceptions announced in class or on Blackboard): Mondays 2:30-4:00 p.m. and Fri 11:00 a.m.-12:00 noon in The Bittersweet, 153 S. Prospect St, SW corner of Main & South Prospect streets. Please make all appointments through ENVS receptionist Cathy Trivieres at 656-4055 or envs@uvm.edu. If she can't find a time that fits your schedule, then e-mail me for an appointment, letting me know what didn't work when you tried to schedule with her. Again, please always put "NR2" (no spaces, no zeroes) in the subject line!

SCHEDULE OF TOPICS, READINGS, & ASSIGNMENTS

Notes:

- (1) This schedule is tentative and **subject to change**. Changes will be announced in lectures and on BlackBoard.
- (2) Except for the textbook (*Environment and Society*) and readings in the public domain (e.g., internet), all readings will be made available in BlackBoard.

Date	Topic & themes	Required readings	Work due
1/20	Introduction & Course Overview		
1/25	The Big Picture: How do we know there is an environmental crisis? (Keyword: Epistemology)	1. <i>Environment and Society</i> , ch. 1, Introduction. 2. Kolbert, "Enter the Anthropocene: Age of Man," http://ngm.nationalgeographic.com/print/2011/03/age-of-man/kolbert-text	Reading log 1
1/27	Population, Development, and the Global Commons: Is there an "overpopulation" problem? What is the "tragedy of the commons"? Why was Hardin's argument influential, and what is its legacy? (Perspective: Limits)	1. <i>Environment and Society</i> , ch. 2, "Population and Scarcity." 2. Hardin, "The tragedy of the commons"	
2/1	Socio-Ecological Systems through History: How have human societies interacted with their environments? What can we learn from these interactions?	1. Moran, "The evolution of human-environment interactions" (39-56) 2. Manning, "The oil we eat: Following the food chain back to Iraq," http://ints3102013.wikispaces.com/file/view/Manning+Oil+We+Eat.pdf .	Reading log 2
2/3	"Human Nature" and the Management of the Commons: Does human nature lead to environmental problems? What are the factors contributing to successful (and unsuccessful) management of the commons? (Perspective: Institutions)	1. <i>Environment and Society</i> , ch. 4, "Institutions and 'the commons'"	
2/8	Religion & Environment: How does religion affect our environmental attitudes and practices? Why was Lynn White's argument influential, and what is its legacy?	1. <i>Environment and Society</i> , ch. 5, "Environmental ethics," pp. 66-70. 2. White, "The historic roots of our ecological crisis" 3. Berkes, "Religious traditions and biodiversity"	Place project #1
2/10	Indigeneity, Traditional Ecological Knowledge, & the Columbian Exchange: What do traditional and indigenous knowledges tell us about how we might live sustainably in a given place? What have we learned about this North American land since the "Columbian exchange" began? What about Vermont?	1. Benton & Short, <i>Environmental Discourse and Practice</i> , pp. 11-25, 27-30, 40-42, 52-57. 2. Robtoy, Brightstar, Obomsawin, Moody, "The Abenaki and the Northern Forest"	

2/15	President's Day Holiday: No Class		
2/17	Markets, Industrialism, and Capitalism I: How do markets work, and how could they be used to resolve environmental problems? (Perspective: Markets)	1. <i>Environment and Society</i> , ch. 3, "Markets and commodities"	Writing assignment #1
2/22 2/24	Markets, Industrialism, and Capitalism II: What was the industrial revolution? What is capitalism, and how does it affect our environmental practices? (Perspective: Political Economy)	1. <i>Environment and Society</i> , ch. 7, "Political economy" 2. Eisenberg, "The human mushroom" 3. Foster, "The environment at the time of the industrial revolution" 4. Klein, "Capitalism vs. climate"	Place project #2
2/29 3/2	Romanticism, Conservationism, & the Wilderness Protection Movement: What were the roles of art and science in the rise of modern conservationism? What are some important ethical positions on the environment? (Perspective: Social Construction)	1. <i>Environment and Society</i> , ch. 8, "The social construction of nature" 2. Benton & Short, "No holier temple" and pp. 156-173. 3. Muir, "Hetch Hetchy Valley" and "Save the Redwoods" excerpts 4. Cole, "Essay on American Scenery" (excerpts)	Reading log 3
3/7 3/9	Spring Recess: No Classes		
3/14 3/16	Science and Ethics: Can nature (as studied by science) tell us how to live? Does evolution provide any guidance toward achieving sustainability? The Land Ethic: Do we need one? How can we develop one? (Perspective: Ethics)	1. <i>Environment and Society</i> , ch. 5, "Environmental ethics," pp. 70-79. 2. Benton & Short, "A fierce green fire" (pp 80-89) 3. Brief selections by Darwin and Kropotkin. 4. Leopold, "The land ethic"	Reading log 4
3/21 & 3/23	Technological Civilization and the Modern Environmental Movement: How did the modern environmental movement emerge? What have been its successes and failures?	1. <i>Environment and Society</i> , ch. 6, "Risks and hazards" 2. Benton and Short, "The greening of the United States" (pp. 113-122)	Writing assignment #2
3/28 & 3/30	Radical Activism: Are radical tactics needed to protect animals, trees, rainforests, & the Earth?	1. <i>Environment and Society</i> , ch. 10 and 11, "Trees" and "Wolves" 2. Manes, "Ecotage" 3. Singer, "All animals are equal" 4. Stewart, "Limits of Trooghaff"	Place project #3

4/4 & 4/6	Toward Global Environmental Governance: How is it possible for us to address global environmental problems? What impact does the global “wealth gap” have on environmental affairs? What are the stakes for climate action in a global world?	1. <i>Environment and Society</i> , ch. 9, “Carbon dioxide” 2. McKibben, “Global warming’s terrifying new math” 3. Clapp & Dauvergne, “Brief history of international environmental cooperation” 4. Singer, “What should a billionaire give... and what should you?”	Reading log 5
4/11 & 4/13	Toward Local Environmental Governance: Are local solutions viable in a complex global society? What would such solutions look like here in Vermont?	Read 2 of the following 3 chapters from <i>Environment and Society</i> : ch. 12, “Uranium”; ch. 14, “Lawns”; ch. 15, “Bottled water”	Writing assignment #3
4/18 4/20	Designing Solutions: How can we redesign our world to be more sustainable? <i>Guest panel</i> Feeding the World: How can we sustainably “feed the world”?	1. <i>Environment and Society</i> , ch. 13, “Tuna,” and ch. 16, “French fries” 2. M. Pollan, “Farmer in chief” 3. W. Berry, “The pleasures of eating”	
4/25 & 4/27	Media & Art: What is the role of media and art in creating environmental consciousness?	1. <i>Environment and Society</i> , ch. 17, “E-waste” 2. Katherine Brooks, “18 Green Artists Who Are Making Conservation and Climate Change a Priority,” http://www.huffingtonpost.com/2014/07/15/environmental-art_n_5585288.html	Place project 4
5/2 5/4	Course Review Exam questions to be announced Course review continues		Values Statement
5/9	Final Exam due (by end of day)		

COURSE EXPECTATIONS & EVALUATION

Your final grade in this course will be a sum of the following:

	Max. points
Lecture quizzes & exercises	5
Discussion section attendance and participation	20
Reading Logs (4 @ 2.5 pts. each)	10
Writing Assignments (5 + 5 + 10 + 5 pts.)	25
Place blog project	20
<u>Final exam</u>	<u>20</u>
TOTAL	100
+ optional extra-credit assignments	5

Your total number of points will be converted to a letter grade according to the following scale:

98 & up = A+	93-97.9 = A	90-92.9 = A-
87-89.9 = B+	83-86.9 = B	80-82.9 = B-
77-79.9 = C+	73-76.9 = C	70-72.9 = C-
67-69.9 = D+	63-66.9 = D	60-62.9 = D-
0-59.9 = F		

1. Lecture attendance, quizzes & writing exercises (5 pts.)

You will not be rewarded (directly) for attending lectures, nor punished for missing them. But it will be much more difficult to do well in the course without attending them. Lectures will share the key materials to be used in the course and on which you will be examined. If you must miss a lecture, for whatever reason, you should find out what you missed. If you don't, you will likely fall behind. It is your responsibility, not anyone else's, to catch up on anything you have missed.

There may be occasional quizzes or two-minute writing exercises covering lecture materials and readings; sometimes these will be announced one class ahead, sometimes not. But these will not be worth more than 1% each, and together not more than 5%, of your final grade.

Laptops will only be allowed in the lecture if you use them for taking notes in class, and *only* if you sit in the last two rows or in the one seat at the very end (right or left) of another row. (If it turns out that we need an extra row or so to this "laptops allowed" section, we will add one.) Students doing other things on their computers distract other students and make it difficult for everyone around them to pay attention; please don't do it.

Cell phones should be turned off in class.

2. Discussion section participation (20 pts.)

Unlike lectures, attendance in discussion sections *will* be taken. The point of these is to create a small but effective learning community. You will be evaluated less on whether you attend than on your contribution to the group. This will consist of two main elements:

- The quality of your contribution to class discussion: i.e. how your participation reflects your knowledge of the reading material, your familiarity with issues raised in the lectures, and your ability to apply course concepts to real-world issues, make connections between the concepts, and critically reflect on them;
- Your contribution to the social dynamic of the discussion: i.e. contributing to the overall progress of the discussion and to a healthy conversational flow, staying on topic, listening carefully to others' contributions, respecting opinions of others, etc.

You are expected to do the week's readings prior to the discussion group in which they are to be discussed.

When there is a reading log due, it is due by the beginning of the discussion section. Please also see Appendix A below (on "Discussion Section Preparation" and "Critical Skills").

3. Reading logs (4 submissions @ 2.5 pts. each = 10 pts. total)

You will be required to hand in a short reading log **four times** during the semester. There will be five opportunities for these, so one of these can be skipped.

Format: The logs should be typed and at least 1-1/2 pages double-spaced (or 3/4 single-spaced pages, depending on your TA's requirements), and no longer than 2 pages each, in length. Specific questions will normally be provided for these. *If* no specific questions have been posted by 9 a.m. on Monday of the given week, then you should follow this "generic" format:

- Summarize the readings, their main ideas and, if relevant, main differences (min. 1/2 page ssp); and

- b) Provide your personal response to the readings (min. 1/4 page ssp). These may consist of evaluative comments (i.e. your agreement or disagreement with specific points *and your reasons* for your position), points you are puzzled by, and possible applications of the ideas contained in the readings.

Please note that reading logs are not private diaries. They are required to respect contemporary standards of public discourse (i.e., avoiding vulgarity, hate language, etc.).

Submission and grade: The reading logs are to be submitted to your TA at the beginning of the relevant discussion section, unless your TA announces a different submission system (e.g., electronic). Grading will be based on the following:

- a) **On-time completion grade:** You will receive up to 1.5 points for each completed log (to a maximum of 6 pts. in total), but only if it is submitted on time and if it meets the format requirements. For instance, if you are given two reading log questions for a given week and you only answer one of them, you will receive only 0.75 pts. for the submission.
- b) **Quality grade:** You will receive up to 1 point per submission (to a maximum of 4 pts.) for the quality of your four reading logs. They will be assessed for their organization, the extent to which you have put the ideas of the readings into your own words, have represented them correctly and have indicated reasonable depth in understanding, and for thoughtfulness and sophistication in your reflections. For this part of the assignment, "A" will be worth 1 point, "B" will be 0.75, "C" will be 0.5, "D" will be 0.25, and "F" will be 0.

4. **Writing Assignments** (three assignments @ 5 pts. each; one assignment @ 10 pts. = 25 pts. total)

There will be four writing assignments with due dates as follows:

1. **Critical analysis** of an influential article in environmental thought (5 pts.), due Feb. 18/19.
2. **Comparative analysis / debate proposal** (5 pts.), due Mar. 17/18.
3. **Research assignment** (10 pts.), due April 14/15.
4. **Personal statement of values** (5 pts.), due April 28/29.

Detailed instructions for each assignment will be handed out and/or posted on Blackboard. TAs will grade the Written Assignments based on the quality of content (e.g. analysis, synthesis & argumentation) and with an expectation for high quality college level writing (e.g. organization, grammar, spelling, bibliographic style). On all of these things, please consult your copy of the *Pocket Reference for Writers*.

If writing is a challenge for you, please make a point of consulting the Writing Mentors assigned to the class (Sonya Gluck and Sydney Lister) or the Writing Center (<http://www.uvm.edu/~wid/writingcenter/>.) Your tuition dollars already pay for the delivery of such services – make use of them! Free writing tutors will be rare once you leave campus.

5. **Place-Based Interpretation Project** (20 pts.)

This project builds on the Place-Based Phenology Project undertaken in NR 1. (See the handout in Blackboard for details on that.) Note that if you have not taken NR 1, then you may either (a) find your own place that fits the project goals or (b) team up with one other student in your lab who did take the course and who agrees to carry out the work in collaboration with you. The place should be a specific site within the Greater Burlington area that includes vegetation and other natural features, and that is easily accessible to you, such that you can visit it repeatedly in a way that will allow you to get to know the place in detail. If you did take NR 1 and would like to change your site, you can do that. Students selecting new sites should confirm them with their TAs.

While the main task in NR 1 had been to observe and document the unfolding of the fall season in your selected place, the task here will be to interpret the many connections between this particular place and the broader cultural—including social, political, economic, and technological—features and processes within which this place has been and continues to be embedded and by which it is shaped, historically and today. Observations of change in the site should include reference to natural features and processes (such as temperature changes) and to cultural features and processes.

As in NR 1, you will be responsible for maintaining a WordPress blog at <http://blog.uvm.edu> and for posting responses to the specific prompts by the due dates listed below. Your blog will be graded on the degree and quality of comprehensiveness, integration, insight, observation, expression, and creativity.

February 11 (9 AM) – Please post the following:

- (1) a link to a Google map showing the location of your site to the Lab Blog on your lab Blackboard page;
- (2) a link for your WordPress Site Blog on your lab Blackboard page.

If you kept a phenology blog in NR1, please also provide

- (3) a brief (1 to 2 paragraph) description of the most prominent forms of interplay between “nature” and “culture” at this particular site.

If you did not, please begin by providing

- (3) a brief introduction to your site, including its location (how to get there, why you chose it), its most prominent visual and sensorial features, an embedded Google map showing its location, and at least one original photo or sketch of the site;
- (4) follow this with a brief (1 to 2 paragraph) description of the most prominent forms of interplay between “nature” and “culture” at your site.

Your TA will be making a whole-lab map showing each person’s location and linking your blog to that map.

February 25 (9 AM) – Select two of the following socio-environmental perspectives and create a blog post detailing some ways in which they are reflected in changes that have occurred at your site: (1) Limits, (2) Institutions, (3) Markets and Political Economy (counts as one). This might require doing a bit of historical research on the landscape (e.g., through the Landscape Change Program (<http://www.uvm.edu/landscape/>), the Vermont Digital Newspaper Project (<http://library.uvm.edu/vtnp/>), the Government Information and Maps Library (<http://library.uvm.edu/docs/>), Fletcher Free Library’s Reference section (<http://www.fletcherfree.org/>)). Some questions you might ask yourself as you prepare your blog post are the following: (1) Limits: What are the signs of “resource use” and competition for resources at this site? How has this changed over time, and how might it be changing now? (2) Institutions: What norms and/or institutions regulate human behavior and nonhuman activity at this site? How have these changed, and might they change in the future? (3) Markets & Political Economy: How does the market valuation of land at this site contribute to what it is? How do economic interests and power relations converge (or diverge) in this? How have these relations changed over time? Be creative in the ways you address these relationships in your blog post.

March 30 (9 AM) – Create a blog post applying both of the final two socio-environmental perspectives (Ethics, Social Construction) to your site. Questions you might ask here include: What ethical assumptions are reflected in people’s behavior at this site? How might two of the rival ethical theories discussed in the class result in different attitudes or behavior at this site? What social constructs (e.g., discourses or narratives of nature, land, wilderness, etc.) influence your or others’ perceptions of this site, and how have they helped shaped the site’s present and possible future? Be creative in the ways you address these topics.

April 20 (9 AM) – For your final blog post, your task is the following. It consists of two parts.

(i) Consider ways in which the lessons of the six theoretical perspectives – limits, institutions, markets, political economy, social construction, and ethics – might be applied toward shaping a promising future for your chosen site. Consider also the ways in which that site is dependent on what others – other people, animals, and so on – do at and in relation to that site. (Some of those things could even originate far away from the physical site, but still impact them.) How could you join with others to work toward a promising future? What forms or mechanisms would that take? (Refer to the theoretical perspectives that are most relevant.)

(ii) Thinking of yourself as a “temporary citizen” of your blog site, seek out a few other such “citizens” of your blog site (however you have defined that site). They could be classmates whose sites are nearby, or they could be human or nonhuman dwellers who interact with it in various ways. See what arrangements you might be able to make or negotiate with them toward establishing a sense of “care” for that site. If they are nonhuman dwellers, describe what forms those interactions might take. Write up your efforts.

6. **Final examination** (20 pts.)

The final examination will be a sit-down exam and will take place during the formal exam period. It will cover all the material in the course. You are therefore strongly encouraged to keep good notes from all lectures. The exam will include some short-answer or quiz-style questions, as well as 2 to 3 essay-style questions, with the latter being worth at least 12 points (60% of the exam). You will be provided the essay questions (but not the short/quiz questions) at least one week ahead of the exam date. You will be allowed to bring in one 9"x11" sheet of single-sided notes to the exam room.

7. **Optional extra-credit assignments** (up to 5 pts.)

A number of extra-credit assignments may be made available throughout the semester, for a maximum of 5 grade points. They will normally be lectures or special events which you can attend and write about. A 1 to 2 page summary sheet, including a one-to-two paragraph critical analysis, will be valued at 1 point, where 0.8 is for attendance and summary (not graded for quality), while the remaining 0.2 pt. is for quality of summary and critical response. Extra-credit opportunities will be announced in class and posted on BlackBoard.

COURSE THEMES

1. The environmental crisis: Its causes and potential solutions

The immensity and complexity of the ecological (and social) challenges facing humanity are greater than at any time in human history. Are we equipped to meet those challenges successfully? To answer this, the course will focus around an overarching question: **What are the factors that shape a society's ability to respond to environmental challenges, and how can we work with those factors to bring about positive environmental change?** Several of these factors, and the relations between them, will be examined in depth. These include:

- Uncontrolled population growth: The world's human population has surpassed seven billion. How many people can the Earth support? Does it matter what those people do? If the average American consumes 16 times the energy and produces 16 times the waste of the average Indian and the population density of India is (only) 10 times that of the United States, which country is more "overpopulated"? And what has *caused* such rapid increases in population and consumption? (Relevant perspective: Limits)
- Human nature: Some place the blame for the ecological crisis on "greed" or some other characteristic of human nature. But a comparative study shows that certain societies seem to enable greedy behavior by individuals, while others do not. Which features of human nature are universal, and which are culturally conditioned? (Relevant perspectives: All)
- Unsustainable techno-economic systems: Many have blamed the environmental crisis on industrialism, a technological system that allows maximal manipulation of the world for human benefit (rather than participation *in* the world, with obligations to other creatures). Others blame capitalism, an economic system that treats constituent parts of the world as exchangeable commodities and trades them for personal gain. Going further back in history, a minority of thinkers have proposed that agriculture, in giving us the power to decide what should grow and what should not, was the original turning point that set humanity on a collision course with the natural world. What are the roles of these and other techno-economic systems in today's ecological crises? (Relevant perspectives: Limits, Institutions, Political Economy)
- Unsustainable social structures: Some have blamed hierarchical state societies for leading to an inability to respond appropriately to ecological challenges; the thinking here is that as people become invested in maintaining their own status and position at the expense of societal and environmental welfare, a society loses its ability to respond to challenges. Others have blamed patriarchy, a male dominated social system in which competition and aggression, rather than cooperation and negotiation, dominate social behavior. How do class, racial, gender, and other inequities interact with other factors to constrain society's ability to respond to challenges? (Relevant perspectives: Institutions, Political Economy)

- Religious and cultural value systems. Religious values have provided a guiding force for human activities, and are arguably responsible for many of humanity's greatest achievements, but also for some of its most tragic moments (such as inquisitions or religious wars). Some have blamed specific religious traditions (such as Christianity or monotheistic religions) for promoting the view that humans are superior to nature, or that the earthly world is inferior to another, transcendent world. Others blame science or secular humanism for promoting an "instrumental rationality" that assumes we can do what we like to the world without ethical obligations to other organisms or ecosystems. Who is right? What is the difference between religion, science, and other cultural value systems? Can social transformation toward an ecological society occur *without* a dramatic change in values and beliefs? (Relevant perspective: Ethics, Social Construction)

Each of these factors has been suggested by some as a cause of environmental problems, but each has also been suggested as part of the solution to such problems. For instance, solutions that have been proposed include the imposition of environmental behavior by a "benevolent dictator," market incentives or "green capitalism," "technological fixes," an ethically informed "postmodern science," new institutions of ecological governance, environmental education and cultural transformation, revolutionary forms of activism that would replace capitalism or industrialism with another form of society, the retrieval of indigenous cultures' "traditional ecological knowledge," and the development of a new "green religion" (or the "greening" of existing religions).

We will examine these factors from both perspectives – as parts of the problem and as parts of the potential solution to the problem. But more importantly, the course will be concerned with the larger question of how these various factors interact: i.e., how new ideas and practices emerge, and how old ones that may no longer be appropriate are "let go" or are held onto long after they are useful. How do we decide which of our ideas or practices are no longer useful? How and by whom should these things be decided? What is the role of democratic decision-making (or of authoritarian solutions) in processes of change? These are the questions that anyone entering a career in the environmental and natural resource fields will need to ask themselves as the twenty-first century unfolds. These questions make us more than just consumers of knowledge – they make us **citizens** who can actively engage in the world and change it through our words and our actions.

2. Environmental knowledge and communication

All of these issues are wrapped up in the question of what knowledge is: **How do we know what we know about the state of the world and about the causes and solutions of environmental problems?** (This question belongs to the realm of philosophy called *epistemology*, i.e. the study (*logos*) of knowledge (*episteme*).) Can *science* give us the answers? What if the evidence is uncertain? Science may tell us how things work, but can it tell us how we should live? If not, what about religion, philosophy (ethical reflection), myth (story-laden commitments and beliefs), or the arts? How do we assess knowledge about the present and the future? How do we respond to change and to uncertain outcomes? What role has culture (religion, beliefs and values, cultural identities) played in resisting, adapting to, or facilitating change? Do people change their behavior as a result of a change in beliefs and values (as many environmentalists hope will happen), or do they change their behavior first (to suit their own ends, or to make ends meet) and then simply justify that behavior with their beliefs and ideologies? The latter question reflects the difference between materialist and idealist forms of social explanation, that is, those which focus on the causal efficacy of material forces or processes (including what people *do*) and those which focus on the greater importance of ideas, beliefs, and values what people (what people *think*). Typically, the Limits, Markets, and Political Economy perspectives are materialist, while the Ethics and Social Construction perspectives are idealist. If idealism is correct (even partially), then *communication* becomes crucial – which is why we focus so much on debate, writing, and argumentation; but if materialism is more correct, then we must change "the system." But how?

3. Six perspectives (paradigms) on environment and society

Perspective (Text) Main representatives	Focus, Example Concepts, Questions	Problem	Solution
1. LIMITS (E&S ch. 2) Biologists, ecologists, natural scientists	Numbers: population (too many) vs. resources (too few); Ecosystemic interrelationships. Overpopulation, Limits to growth, Carrying capacity, Ecological footprint <i>How many people/organisms are there, and how many resources?</i>	Overuse, 'overshoot,' Too many consumers	Reduce! Halt population growth; Rein in consumption
2. MARKETS (E&S ch. 3) (Neoclassical) economists	Dollars: buying & selling, Market allocation; Market-based solutions Green taxes, Green consumption, Carbon trading, Green certification <i>How do we quantify X so that it can be counted in economic transactions?</i>	Overregulation (irrational intervention into markets); Externalities (inadequate calculation of costs)	Recalculate! Monetize externalities, then let market do its 'magic'
3. INSTITUTIONS (E&S ch. 4) Social scientists, esp. institutionalists	Social rules, norms, constraints; Formal & informal institutions Stakeholders, Agreements, Protocols <i>How do people make decisions & negotiate relations among themselves? What institutional arrangements would help shape more appropriate practices?</i>	Broken or inadequate institutions	Renegotiate! Develop appropriate institutional arrangements, incorporate all stakeholders
4. POLITICAL ECONOMY (E&S ch. 7) Social scientists, esp. Marxists	Power relations & economic interests, class dynamics, ideology Capitalism, Labor, Uneven Development, Accumulation, World System, Ideology <i>What are the economic determinants of power in a society? Who really controls things? Whose interests are being served?</i>	Systemic exploitation & domination, esp. via capitalism	Restructure! Rein in or dismantle 'the System' & replace it with a just & sustainable one
5. ETHICS (E&S ch. 5) Philosophers, activists, lawyers	Values, principles, moral & ethical appeals & arguments Right vs. Wrong, Intrinsic values, Rights, Stewardship, Land Ethic, Justice <i>What is the right thing to do in this situation, and why? What obligations do we have for others (e.g., other species, future generations)?</i>	Inadequate ethical articulations or value systems (e.g. anthropocentrism, sexism, etc.)	Revalue! Transform our value systems through more appropriate ethical standards, procedures & recognitions
6. SOCIAL CONSTRUCTION (E&S ch. 8) Humanists, esp. literary & cultural scholars, historians (of ideas)	Language, representation, socially shaped discourses, images, beliefs Social construction, Discourse, Narratives, Ideology, Risk perception <i>How did X come to be seen and understood in this way? How are these things perceived in other cultural conditions? How might they be understood differently?</i>	Outdated or inappropriate assumptions, concepts, narratives, categories	Reimagine! Deconstruct outdated notions & develop new ones, drawing on culturally & historically diverse resources

APPENDIX A: DISCUSSION SECTION PREPARATION

1. Suggested Skills for Successful Classroom Discussion

- Come to class prepared, having read and thought about the readings.
- Be SYMPATHETIC and understanding of other people's views.
- Try not to let your previous ideas or prejudices interfere with your ability to think and reconsider things from different perspectives.
- PRACTICE LISTENING by trying to formulate in your own words the points other speakers are making.
- It's okay to speak even if your idea may be incompletely formulated (as long as you are not interrupting someone else).
- STICK TO THE SUBJECT; don't ramble on.
- Give encouragement & approval to others.
- SEEK OUT DIFFERENCES of opinion; they enrich the discussion.
- SEEK OUT COMMONALITIES in views, not *just* differences.
- SEEK THE BEST ANSWER rather than trying to convince people.

2. Critical Skills: Some Qualities of a Critical Thinker

One of the objectives of this course (#2) is the development of critical skills in interdisciplinary environmental studies. In popular usage, the term "critical" is often used to denote "negative," but in academic life it is intended to mean something more like "intelligent, judicious, informed, and analytical." The following are recognized to be some qualities of a critical thinker (in this sense of the word).

- SELF-AWARE: aware of your own opinions & of the reasons why you hold them
- OPEN-MINDED: open to discovering new knowledge, and to changing your own ideas if new knowledge warrants it
- FLEXIBLE: seeing disputes & disagreements as opportunities for learning & deepening your knowledge
- JUDICIOUS: able to RECOGNIZE, UNDERSTAND, and EVALUATE competing ARGUMENTS
- RESPECTFUL OF OTHER VIEWS: not just being *tolerant* of other views but being willing to treat their views seriously, to defend their right to have and express those views, and to try to understand the differences as well as the similarities between their views and yours
- RESPECTFUL OF DIFFERENT STYLES OF THINKING & LEARNING: aware that there are different ways of learning about things, different styles of thinking and expression, and that group dialogues are most effective when these differences are accounted for
- CULTURALLY & CONTEXTUALLY SENSITIVE: understanding the role that social & cultural CONTEXTS & LIFE EXPERIENCES play in differences of opinion and ways of expressing (or not expressing) such opinion; some of those life experiences differ along variables such as those of race, social class, gender, ethnicity, sexual orientation, religion, and others
- attentive to the PROCESS of thought, argumentation & debate, and the INCLUSIVENESS of that process
- able to apply a VARIETY of CONCEPTUAL TOOLS & FORMS OF REASONING, including inductive and deductive reasoning, recognizing logical fallacies and contradictory reasoning, summarizing and contextualizing arguments, etc.
- willing to seek CONSENSUS (agreement), but able to live with DIFFERENCES

APPENDIX B: OTHER COURSE & SCHOOL POLICIES

1. Student Learning Accommodations: In keeping with UVM policy, any student with a documented disability interested in utilizing accommodations should contact the ACCESS (Disability Services) office, A170 Living/Learning Center (802-656-7753; access@uvm.edu; www.uvm.edu/access). ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations via an accommodation letter to faculty with approved accommodations as early as possible each semester. Students are encouraged to meet with instructors to discuss the accommodations they plan to use in each course.

2. Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss classes to observe religious holidays, please submit the dates of your absences to your TA or to me in writing by the end of the second week of classes (Jan. 29). You will be permitted to make up work within a mutually agreed-upon time.

3. Academic Integrity and Honesty: The University of Vermont's code of standards on academic integrity includes the following statements regarding student work:

"All academic work (e.g., homework assignments, written and oral reports, creative projects, performances, in-class and take-home exams, extra-credit projects, research, theses and dissertations) must satisfy the following four standards of academic integrity:

1. All ideas, arguments, and phrases, submitted without attribution to other sources, must be the creative product of the student. Thus, all text passages taken from the works of other authors must be properly cited. The same applies to paraphrased text, opinions, data, examples, illustrations, and all other creative work. Violations of this standard constitute *plagiarism*.
2. All experimental data, observations, interviews, statistical surveys, and other information collected and reported as part of academic work must be authentic. Any alteration, e.g., the removal of statistical outliers, must be clearly documented. Violations of this standard constitute *fabrication*.
3. Students may only collaborate within the limits prescribed by their instructors. Students may not complete any portion of an assignment, report, project, experiment or exam for another student. Students may not provide information about an exam (or portions of an exam) to another student without the authorization of the instructor. Violations of this standard constitute *collusion*.
4. Students must adhere to the guidelines provided by their instructors for completing coursework. For example, students must only use materials approved by their instructor when completing an assignment or exam. Students may not present the same (or substantially the same) work for more than one course without obtaining approval from the instructor of each course. Violations of this standard constitute *cheating*."

Failure to abide by these standards constitutes **academic dishonesty**. If you have doubts about whether you may be violating any of these principles, it is your responsibility to discuss your concerns with your TA (or with me). Academic honesty is the foundation of all scholarship. Failure to follow the above university-wide rules will be penalized, and may result in course failure (a grade of "F").

4. Related resources

UVM policy on academic integrity: <http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf>

Grade appeals: <http://www.uvm.edu/~uvmppg/ppg/student/gradeappeals.pdf>

Code of Student Rights and Responsibilities: www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf

FERPA Rights Disclosure (student records privacy rights): <http://www.uvm.edu/~uvmppg/ppg/student/ferpa.pdf>

UVM policy on disability certification & student support: www.uvm.edu/~uvmppg/ppg/student/disability.pdf

Center for Health and Wellbeing: <http://www.uvm.edu/~chwb/>

Counseling & Psychiatry Services (CAPS): (802) 656-3340

Note: If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <http://www.uvm.edu/~dos/>

For other policies, see www.uvm.edu/academics/catalogue and click on Policies (A-Z).